DAVEY PRODUCT GUARANTEE FOR AUSTRALIA & NEW ZEALAND

This Davey product is guaranteed to be free of material or manufacturing defects at the time of original purchase. Should any part fail as a result of such defects within one year of original purchase, the product will be repaired free of charge.

TERMS AND CONDITIONS

1. **This guarantee applies to all states and territories of Australia and New Zealand only and is subject to the provisions of the Trade Practices Act (Aust.), the Goods and Consumer Protection Legislation of the various Australian states and the Consumers Guarantee Act 1993 (NZ) as applicable.**
2. **The guarantee period commences on the date of original purchase of the equipment. Evidence of this date of original purchase must be provided when claiming repairs under guarantee. It is recommended you retain all receipts in a safe place.**
3. **This guarantee covers parts and workshop labour only. Goods should be forwarded, with proof of date of original purchase, to an Authorised Davey Service Centre freight paid.**
4. **This guarantee is subject to due compliance by the original purchaser with all directions and conditions set out in the Installation and Operating Instructions. Failure to comply with these instructions, damage or breakdown caused by fair wear and tear, negligence, misuse, incorrect installation, chemical or additives in the water, inadequate protection against freezing, rain or other adverse weather conditions, corrosive or abrasive water, lightning or high voltage spikes or through unauthorised persons attempting repairs are not covered under guarantee. The product must only be connected to the voltage shown on the nameplate.**
5. **Continuous operation or operation with impure water or with abrasive materials in the water will accelerate wear and reduce the life of the product. Failure from these causes is excluded from repair under guarantee.**
6. **Without limiting the original purchaser's entitlements under the Trade Practices Act (Aust.), the Goods & Consumer Protection Legislation of the various Australian states, or the Consumers Guarantee Act 1993 (NZ), Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from the product or any defect.**
7. **Where the Trade Practices Act (Aust.), the Goods and Consumer Protection Legislation of the various Australian states and the Consumers Guarantee Act 1993 (NZ) does not apply, Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever suffered by the purchaser arising directly or indirectly from the product or any defect and the purchaser shall indemnify Davey against any claim by any other person whatsoever in respect of any such loss, damage or injury.**
8. **Nothing in this guarantee is intended to have the effect of contracting out of the provisions of the Trade Practices Act (Aust.), the Goods and Consumer Protection Legislation of the various Australian states and Consumers Guarantee Act 1993 (NZ) except to the extent permitted by the various Acts and this guarantee is to be modified to the extent necessary to give effect to that intention.**
9. **Davey may be collecting personal information from you in order to provide you with a service. Davey Pumps Pty Ltd promises only to use this information in accordance with the Provisions of the Privacy Act 1988 (Cth) and the Privacy Policy of Davey Pumps Pty Ltd which is available at www.davey.com.au.**

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DEPEND ON DAVEY

WATER PRODUCTS

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DEPEND ON DAVEY

WATER PRODUCTS

Sump Pump

INSTALLATION AND OPERATING INSTRUCTIONS

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

CAUTION: This pump MUST be installed with a suitable earth leakage circuit breaker (E.L.C.B.) or residual current device (R.C.D.) and in compliance with local electrical standards.

These instructions must be delivered with the pump to the operator.

MODELS

DEWATERING:	D75, D150, DT08, DT15, DT22, DT37, DT55, DT75
SEWAGE:	D75S, D150S, DT08S, DT15S, DT22S, DT37S, DT55S, DT75S
CUTTER:	D75K, DT08K, DT15K, DT22K, DT37K, DT55K, DT75K
VORTEX:	D75V, D150V, DT08V, DT15V, DT22V, DT37V, DT55V, DT75V
GRINDER:	D120G/A, D150G/A, DT12G, DT15G, DT22G, DT37G
SAND:	DT37KZ, DT55KZ, DT75KZ, DT110KZ, DT150KZ, DT220KZ
SLUDGE/SLURRY:	DT37KZN, DT55KZN, DT75KZN, DT110KZN, DT150KZN, DT220KZN

Suffix: A = Automatic Float Switch Fitted
M = Manual (D75 Models only)

Voltage: 220/250V 50Hz Single Phase
380/440V 50Hz Three Phase

Installation & Operating Instructions

The Davey range of Submersible Sump Pumps are suitable for small to medium Dewatering (or recirculating) applications. Sewage (S) & Cutter (K) models are suitable for pumping soft solids in fluid suspension up to 80% of the discharge diameter. Cutter & Grinder (G) models are also suited to pump soft string-like materials such as hair, lint, straw etc. In addition, Grinder models can pump cloth, rubber gloves, sanitary products etc. While both Dewatering and Sewage models can pass some hard solids with little or no damage, Cutter & Grinder models should not pump hard solids as these may damage the cutter faces.

Vortex (V) models are designed to pump soft solids in suspension up to 80% of the discharge diameter. Sand (KZ) and Sludge /Slurry (KZN) models are specially designed to handle hard solids in suspension, up to 70% by volume and in size from 20 to 35mm depending on model.

All models are extremely quiet in operation which makes them ideal for applications within residential areas for sullage pits, waterfalls and general drainage.

Other Ideal Applications are:

Lift Wells	Car Park Sumps	Sewage Pumping - Grinder & Vortex models
Basements	Cable Pits, etc.	Mining & Construction - KZ & KZN models

Not intended to be used for swimming pool. Note that these pumps may be used for the repair or maintenance of swimming pools, but never with people present in the water.

This Submersible pump has been factory checked prior to delivery; however, please check for any damage during transport. After Sales Service is available from Davey or Special Davey Authorised Service Dealers.

DO NOT:
- **Run the pump dry.**
- **Attempt electrical repairs, unless qualified to do so.**
- **Run the pump with the motor fully exposed for long periods.**
- **Install the pump on soft or loose ground.**
- **Operate the pump if the inlet is submersed by sand or debris.**
- **Lift or carry the pump by the power cable.**
- **The pump can only be used for pumping water. Do not use for pumping liquids such as oil, sea-water or organic solvents.**
- **Do not run the pump in explosive or fire hazardous surroundings or for pumping explosive liquids.**
- **Do not run the pump when the pump is partially or completely dismantled.**

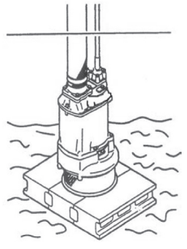
Suitable Fluids

This pump is designed to pump waste water, clean water and water containing mild pollutants at ambient temperatures. It is **not suitable** for pumping flammable or corrosive fluids, nor fluids at elevated temperatures. If you are unsure as to the suitability of the fluids, contact your Davey dealer for advice.

Other than KZ or KZN models, these pumps are not a sand or slurry pumps. They are not designed to pump hard solids (eg stones) nor fluids containing excessive amounts of abrasive materials. In any case, any solids pumped will eventually lead to wear of components.

Installation

This Davey pump is completely submersible up to 10 metres and should be placed on a solid flat surface (if not available, sit the pump on timber or house bricks) in the vertical position. Pump should always be installed so that it will be clear of settled silt or debris. It is recommended to fit the biggest diameter hose possible, to obtain the best flow from the pump. To remove or lift the pump from deep wells or pits connect a rope to the handle during installation. Automatic versions should be placed in a sump which has adequate dimensions so as not to restrict the movement of the float switch.
Automatic controlled pump units have float switches factory set to provide the correct high (ON) and low (OFF) liquid levels.
Quick connect rail kits are available for SEWAGE. CUTTER and GRINDER models. Contact your Davey Dealer for details.



CAUTION: When handling the pump manually, please ensure that this is done with due respect and in compliance with applicable safe handling procedures. These pumps may exceed safe lifting limits for individuals.

Power Connection

In accordance with AS 3350.2.41 we are obliged to inform you that this pump is not to be used by children or infirm persons and must not be used as a toy by children.

Power Connection
Connect lead to power supply designated on pump label. Do not use long extension leads as they cause substantial voltage drop, poor pump performance and may cause motor overload.

NOTE:
If the cord is damaged, the appliance should be repaired by a qualified Davey Service Centre. The supply cord must only be replaced by a suitably qualified person with a genuine Davey replacement supply cord.

A power connection point should be provided by a qualified electrician, in compliance with the requirements of AS 3000 (1991).

Single Phase
Single phase models are rated for 220/250 Volts, 50Hz operation, and up to 750 Watt may be connected to a standard 10 amp power outlet. 1500 Watt models may be connected to a 15 amp power outlet.
All models have automatic reset thermal overload protection built in, i.e. should overload on motor cause thermal to open circuit and switch motor off, it will automatically reset and switch motor on when motor has cooled down sufficiently, usually within a few minutes.

To avoid damage to the pump and any power leakage, which could result in electric shocks, please ensure that the grounding has been properly installed and checked.

Three Phase
Three phase models are rated for 380/440 Volts, 50Hz operation. **All three phase models must be wired in by an authorised electrician.** If used in conjunction with a contactor we suggest the installation of correctly set additional quick trip or M10 rated overloads.

3Ø Motor kW	Overload Settings
0.75	1.7 amps
1.2	2.3 amps
1.5	3.3 amps
2.2	5.0 amps
3.7	7.4 amps
5.5	11.0 amps
7.5	16.0 amps
11.0	30.0 amps
15.0	37.0 amps
22.0	46.0 amps

Incorrect voltage or frequency of the power source can lead to incorrect functioning of the pump, power leakage or prove to be a fire hazard.

1. Re-check the nameplate for the correct voltage and frequency
2. Check the wiring, power source and the capacity of the earth leakage protector and the insulation resistance of the motor.

* Reference value of resistance = 20MΩ min.

The reference no. of 20MΩ min is based on a new or recently refurbished pump unit.

3. When used with a generator, limit the number of appliances used on the generator at the same time.

Never run the pump when hanging from a chain or cable, where the starting torque may cause the pump to move and cause injury.

Test run the pump for a short very period (1 second or less) to check direction of rotation. This can also be checked with a phase rotation indicator.

When using a phase indicator, please consult the manual of the unit before usage.

If the pump is operating in the reverse, the power connections must be changed by an electrician.

Once correctly connected and installed with water in the pit etc, the electrician should also check for correct power usage, phase balance and general electrical integrity of the installation.

NOTE:

1. **Long extension leads should be avoided as they often have insufficient current carrying capacity to run electric motors, hence they can cause substantial voltage drop and operating problems.**
2. **Minimum voltage at the electric motor must not fall below 216 Volts for single phase, otherwise motor damage may result which is not claimable under guarantee.**
3. **If the electrical fittings in your country make it necessary to remove the plug (where fitted) from the lead fitted to the motor, care should be taken to ensure that the earth conductor green/yellow in the lead is properly connected to a good earth. This work should be undertaken by a suitably qualified person.**
4. **Expansion and contraction inside the motor due to heating and cooling is vented via the lead. The lead end must never be sealed off, but must always be open to the atmosphere.**
5. **Three phase installations MUST always be phase balanced to within 5% variation.**
6. **Ensure all three phase models rotate anti-clockwise when viewed from the bottom or pump end.**

GRINDER MODEL comes with in-built seal cavity sensors fitted. These sensors may be connected to a sensor relay to provide motor protection in the event of seal failure. If you do not require the seal sensor function, simply fix and isolate the sensor lead in a weatherproof enclosure.

Fault Checks

(A) Pump will not start:

(1) Manual Type

- Check to ensure power is available and the outlet is switched ON.
- Blown fuse or tripped circuit breaker (replace/reset or call an electrician).
- If an extension lead is fitted, check connection.

NOTE:
If fitting an extension lead a QUALIFIED ELECTRICIAN should be consulted to ensure correct rating is provided. Extension leads are not allowed for permanent installations.

- Impeller jammed - **disconnect from power supply**, and ensure impeller is free to rotate.
- Thermal cut-out switch has not reset (wait until reset or reset overload for 3Ø).
- If pump does not start from new then the seal has possibly stuck due to the length of time it has been standing since it was manufactured. In this case, disconnect from power supply, remove bottom strainer and turn the impeller nut clockwise, this will release the initial friction on the seal and once the power is connected will allow the pump to work.

(2) Auto Type (with float switch)

- Check all in (1) above.
- Float switch jammed against sump side wall.
- Insufficient liquid to place the float switch in the ON position, i.e. higher than the horizontal.

(B) Pump runs, but does not pump water or pumps insufficient water:

- Check for correct direction of rotation (3Ø only).
- Insufficient liquid in sump.
- Strainer, impeller and/or discharge pipework blocked.
- Impeller damaged.
- Air lock in discharge pipework. Ensure pump is filled with water.
- Excessive back pressure or lift.

(C) Pump will not stop:

(1) Manual Type

- Must be switched off at the power supply.

(2) Auto Type (with float switch)

- Float switch is prevented from moving to the fully down position.
- Float switch may be faulty.

(D) Pump runs for short periods only (the overload protection has tripped):

- Some foreign body is clogging the impeller.
- The liquid temperature is too high.
- Electrical fault.

Do not run the pump dry as this will damage the seal and reduce the life of the pump.

Where hair, lint or other string-like material may be in the water, the pump should be regularly checked. It might become necessary sometimes to clean the suction strainer, impeller and/or discharge pipework.

With simple cleaning and regular examination this pump should give reliable service.

Maintenance

WARNING: When servicing or attending pump, always ensure power is switched off and lead unplugged. Electrical connections should be serviced only by qualified persons. If the electrical supply lead of this pressure system is damaged, it must only be replaced by authorised Davey service personnel as special tools are required.

The oil in the seal chamber should be periodically checked and replaced. This work should be done by a suitably qualified Davey Service Dealer every 2,000hrs of operation or every 12 months, whichever occurs first.